

REMARKS:

Claims 1-5, 7-13, and 15-25 are currently pending in the application.

Claims 27-49 have been canceled without *prejudice*.

Claims 6, 14, 26, and 50-71 have been withdrawn from further consideration.

Claims 1-5, 7-13, and 15-25 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,377,095 to Meada et al. ("*Meada*").

The Applicants believe Claims 1-5, 7-13, and 15-25 are directed to patentable subject matter. Applicants further respectfully submit that all of Applicants arguments are without prejudice or disclaimer. In addition, Applicants have merely discussed example distinctions from the cited prior art. The example distinctions discussed by Applicants are considered sufficient to overcome the Examiner's rejections. Other distinctions may exist, and as such, Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. Applicants also respectfully submit that by not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. Applicants make no admission concerning the merits of the Examiner's rejection, and respectfully reserve the right to address any statement or averment of the Examiner not specifically addressed in this response. Particularly, Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application.

OFFICIAL NOTICE:

The Applicants respectfully submit that the Final Office Action dated 04 June 2007, Page 3, acknowledged that the Examiner is not relying on any Official Notice (or by implication any "common knowledge" in the art) for the obviousness rejection and, therefore, the Examiner is only relying on *Meada* alone for the rejection of 1-5, 7-13, and 15-25 under 35 U.S.C. § 103(a).

REJECTION UNDER 35 U.S.C. § 103(a):

Claims 1-5, 7-13, and 15-25 stand rejected under 35 U.S.C. § 103(a) over *Meada*.

The Applicants respectfully submit that *Meada* fails to disclose, teach, or suggest each and every element of Claims 1-5, 7-13, and 15-25. Thus, Applicants respectfully traverse the Examiner's obvious rejection of Claims 1-5, 7-13, and 15-25 under 35 U.S.C. § 103(a) over *Meada*.

Meada Fails to Disclose, Teach, or Suggest Various Limitations Recited in Applicants Claims

For example, with respect to independent Claim 9, this claim recites:

A system for generating a price schedule for one or more products, the system comprising:

a ***transition graph generator*** operable to generate a ***transition graph*** comprising a ***plurality of paths***, each path comprising a ***plurality of states***, each state having a ***price value***, an ***inventory value***, and a ***state value***, the transition graph generator operable to generate the transition graph by repeating the following for a ***plurality of stages*** until a final stage is reached:

determining the ***price value*** of a ***successor state***;

calculating the ***inventory value*** of the ***successor state*** using the price value and the inventory value of a ***predecessor state***; and

calculating the ***state value*** of the ***successor state*** using the price value and the inventory value of the ***predecessor state***; and

an ***optimizer*** coupled to the ***transition graph generator*** and operable to:

select a ***path according to the state values*** of the states;

and

determine a ***price schedule from the path***. (Emphasis Added).

In addition, *Meada* fails to disclose each and every limitation of independent Claims 1, 17, and 25.

The Applicants respectfully submit that *Meada* fails to disclose, teach, or suggest independent Claim 9 limitations regarding a ***“system for generating a price schedule for***

one or more products". To the contrary, *Meada* discloses a "merchandise analysis system for predicting the sale of a registered item" (Abstract), and more specifically, a "merchandise analysis system for predicting sales figures on the basis of the past actual sales data by item" (Column 1, Lines 8-10).

Specifically, the Applicants respectfully submit that *Meada* fails to disclose, teach, or suggest other independent Claim 9 limitations, such as, but not limited to:

a "**transition graph generator** operable to generate a **transition graph** comprising a **plurality of paths**, each path comprising a **plurality of states**, each state having a **price value**, an **inventory value**, and a **state value**"; and

"by repeating the following for a **plurality of stages** until a final stage is reached:

determining the **price value** of a **successor state**;

calculating the **inventory value** of the **successor state** using the price value and the inventory value of a **predecessor state**; and

calculating the **state value** of the **successor state** using the price value and the inventory value of the **predecessor state**;

In particular, the Examiner appears to be equating the "**transition graph generator**" and "**transition graph**" recited in independent Claim 9 with the "sale prediction" disclosed in *Meada*. (Final Office Action 4 June 2007, Page 4). However, the "sale prediction" disclosed in *Meada* merely provides for "the actual sale by item corresponding to the past price and the selected function" (Column 6, Lines 48-58), and **does not include, involve, or even relate to a transition graph or even a plurality of paths, a plurality of states, an inventory value, and a state value**, as recited in independent Claim 9.

The Applicants refer the Examiner to the Specification, page 8 lines 11-32, for a discussion and definitions of these terms. As one example, "inventory value [] represents the number of units of the product in the inventory of [the] company" (Specification, page 8 lines 11-32), and has nothing to do with "price" as the Examiner mistakenly tries to argue

in paragraph 5, page 2 of the Final Office Action Response dated 04 June 2007. As another example, a “path” represents possible price schedules and is formed from a sequence of “states” over different “stages” coupled by “transitions” (Specification, page 8 lines 11-32), and has nothing to do with “patterns” as the Examiner mistakenly tries to argue in paragraph 6, page 3 of the Final Office Action Response dated 04 June 2007. As a final example, the graph in Figure 9 of *Meada* is not a “transition graph” as depicted in Figure 2 of Applicant’s drawings and discussed in the Specification at page 8, lines 11-32 as the Examiner mistakenly tries to argue in paragraph 6, page 3 of the Final Office Action Response dated 04 June 2007.

Thus, the Applicants respectfully submit that the equations forming the foundation of the Examiner’s comparison between *Meada* and independent Claim 9 cannot be made. The Applicants further respectfully submit that these distinctions alone are sufficient to patentably distinguish independent Claim 9 from *Meada*.

The Final Office Action Fails to Properly Establish a *Prima Facie* case of Obvious over *Meada*

The Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on *Meada* because the Office Action has ***not shown the required teaching, suggestion, or motivation in Meada to modify Meada.*** The Office Action merely states that “it would be obvious to one of ordinary skill in the art to adapt *Meada* to obtain the instant application in order ***to achieve greater flexibility in pricing according to the market.***” (Final Office Action 4 June 2007, Page 4). (Emphasis Added). The Applicants respectfully disagree.

The record is clear that the Examiner is not relying on “Official Notice” or by implication “common knowledge” generally available to those of ordinary skill in the art. However, the Applicants respectfully submit that ***this purported advantage relied on by the Examiner is nowhere disclosed, taught, or suggested in Meada alone.***

A recent Federal Circuit case makes it crystal clear that, in an obviousness situation, the ***prior art*** (in this case, only *Meada*) ***must disclose each and every element***

of the claimed invention, and that any motivation to combine or modify the prior art (Meada) must be based upon a suggestion in the prior art (Meada). See *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). (Emphasis Added). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

With respect to the subject Application, the ***Examiner has not adequately supported the modification of Meada to render obvious the Applicants claimed invention.*** The Examiner's conclusory statement that "it would be obvious to one of ordinary skill in the art to adapt *Meada* to obtain the instant application in order ***to achieve greater flexibility in pricing according to the market***" (Final Office Action 4 June 2007, Page 4), ***does not adequately address the issue of motivation to combine.***

The Applicants respectfully request the Examiner not only ***point to the portions of Meada which expressly disclose and contain the teaching, suggestion, or motivation to modify Meada for the Examiner's stated purported advantage, and in addition explain how the Examiner arrives at this conclusion referencing the cited portions of Meada.*** For example, in *Meada* how does "achiev[ing] greater flexibility in pricing according to the market" provide motivation to "adapt *Meada* to obtain the instant application" and to what extent does the Examiner purport that "achiev[ing] greater flexibility in pricing according to the market" actually applies to the subject Application.

This factual question of motivation is material to patentability, and cannot be resolved on subjective belief and unknown authority. *Id.* The Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a). ***It is improper, in determining whether a person of ordinary skill would have been led to modify Meada, simply to "[use] that which the inventor taught against its teacher."*** *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983).

Thus, the Applicants respectfully submit that the Examiner's conclusory statement that "it would be obvious to one of ordinary skill in the art to adapt *Meada* to obtain the instant application in order to achieve greater flexibility in pricing according to

the market” ***is not supported by Meada or even any type of documentary evidence***, but instead appears to be the Examiner’s opinion formulated using the subject Application as a template, which constitutes impermissible use of hindsight. The Examiner’s statement is also ***not capable of instant and unquestionable demonstration as being well-known***. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be “‘***capable of such instant and unquestionable demonstration as to defy the dispute***’ (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 U.S.P.Q. 6 (C.C.P.A. 1961)).” (MPEP § 2144.03(A)). (Emphasis Added). Additionally, as noted by the court in *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697, ***general conclusions without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection***.

Accordingly, the Office Action fails to provide proper motivation for modifying/adapting *Meada*.

In addition, the Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on *Meada* because the Office Action has ***not shown the required reasonable expectation of success***. As discussed previously, *Meada* only discloses a “merchandise analysis system for predicting the sale of a registered item” (Abstract), and more specifically, a “merchandise analysis system for predicting sales figures on the basis of the past actual sales data by item” (Column 1, Lines 8-10), while Applicants claimed invention is directed to a “***system for generating a price schedule for one or more products***” in which, for example, a “***transition graph***” is generated “comprising a ***plurality of paths***, each path comprising a ***plurality of states***, each state having a ***price value***, an ***inventory value***, and a ***state value***”. The “sale prediction” disclosed in *Meada* merely provides for “the actual sale by item corresponding to the past price and the selected function” (Column 6, Lines 48-58), and ***does not include, involve, or even relate to a transition graph or even a plurality of paths, a plurality of states, an inventory value, and a state value***. Accordingly, nowhere in *Meada* is a transition graph like that exemplified in Figure 2 of Applicants Drawings even depicted, and ***there certainly would be no predictable results*** if *Meada*’s “merchandise

analysis system for predicting the sale of a registered item” tried to generate “a price schedule for one or more products” as recited in Applicants claims.

Finally, the Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on *Meada* because the Office Action has ***not shown that Meada teaches or suggests all the claim limitations***. All the claim limitations must be taught or suggested *Meada*, and the Examiner has given no proposed modification of *Meada* necessary to arrive at the claimed subject matter.

Specifically, the Examiner has not properly complied with MPEP §706.02(j). According to MPEP § 706.02(j), after indicating that the rejection is under 35 U.S.C. 103, the Examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,

(B) **the difference or differences in the claim over the applied reference(s),**

(C) **the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and**

(D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

Previously, the Applicants have already discussed the shortcomings in the Final Office Action as to the lack of any explanation as to why one of ordinary skill in the art at the time the invention was made would have been motivated to modify *Meada*.

In addition, with respect to any of the claim limitations, the Applicants further respectfully submit that ***the Examiner has not set forth any argument/remarks regarding the differences in Applicants claim limitations over Meada or asserted any proposed modifications of Meada to arrive at Applicants claimed invention***. Normally, an obviousness rejection based upon a single reference relies upon “Official Notice” or “common knowledge” to fill in the gaps, i.e., disclose the acknowledged deficiencies of the prior art, to arrive at a claimed invention. However, in the subject Office Action, while the Examiner relies on an obviousness rejection, based upon *Meada* alone,

the record is clear that the Examiner is not relying on “Official Notice” or by implication “common knowledge” generally available to those of ordinary skill in the art to fill in any gaps in the differences in Applicants claim limitations over *Meada*. For example, there must be some differences in Applicants claim limitations over *Meada* in an obviousness rejection under §103 as compared to an anticipation rejection under §102.

Thus, in the subject Office Action, the Examiner acknowledges that *Meada* fails to disclose, teach, or suggest all the claim limitations, but has not given any proposed modification of *Meada* necessary to arrive at the claimed subject matter, or has not presented a convincing line of reasoning, let alone any reasoning, why the artisan would have found the Applicants claims obvious in view of *Meada*. Accordingly, if the Examiner continues to maintain the rejection under 35 U.S.C. § 103(a) based on *Meada* alone, Applicants respectfully request that the Examiner provide a proper argument in support of the Examiner’s rejection with respect to the limitations claimed by Applicants, as necessitated by MPEP § 706.02(j).

Applicants Claims are Patentable over *Meada*

The Applicants respectfully submit that independent Claims 1, 17, and 25 are considered patentably distinguishable over *Meada*, for at least the reasons discussed above in connection with independent Claim 9.

With respect to dependent Claims 1-5, 7, 8, 10-13, 15, 16, and 18-24: Claims 1-5, 7, and 8 depend from independent Claim 1; Claims 10-13, 15, and 16 depend from independent Claim 9, and Claims 18-24 depend from independent Claim 17. As mentioned above, each of independent Claims 1, 9, 17, and 25 are considered patentably distinguishable over *Meada*. Thus, dependent Claims 1-5, 7, 8, 10-13, 15, 16, and 18-24 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

For at least the reasons set forth herein, Applicants respectfully submit that Claims 1-5, 7-13, and 15-25 are not rendered obvious by *Meada*. The Applicants further respectfully submit that Claims 1-5, 7-13, and 15-25 are in condition for allowance. Thus,

the Applicants respectfully request that the rejection of Claims 1-5, 7-13, and 15-25 under 35 U.S.C. § 103(a) be reconsidered and that Claims 1-5, 7-13, and 15-25 be allowed.

THE LEGAL STANDARD FOR OBVIOUSNESS REJECTIONS UNDER 35 U.S.C. § 103:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, ***there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.*** Second, there ***must be a reasonable expectation of success.*** Finally, ***the prior art reference*** (or references when combined) ***must teach or suggest all the claim limitations.*** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, ***and not based on applicant's disclosure.*** *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

With respect to alleged obviousness, ***there must be something in the prior art as a whole to suggest the desirability,*** and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. The consistent criterion for determining obviousness is whether the prior art would have suggested to one of ordinary skill in the art that the process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art. Both the suggestion and the expectation of success must be founded in the prior art, not in the

Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988); M.P.E.P. § 2142.

A recent Federal Circuit case makes it clear that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

CONCLUSION:

In view of the foregoing remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

Although the Applicants believe no fees are deemed to be necessary; the undersigned hereby authorizes the Commissioner to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777**.

Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.

Respectfully submitted,

3 August 2007
Date

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